

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

ATTY. DOCKET NO.

F064

SERIAL NO.

09/765,806

APPLICANTS Gerlach et al.

FILING DATE

January 19, 2001

GROUP ART UNIT

2881

U.S. PATENT DOCUMENTS

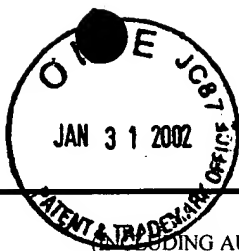
*Examiner Initial	Cite No.	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date (if appropriate)
M.E.	A	4,634,871	Jan 6 1987	Knauer	250	398	
M.E.	B	4,661,709	Apr 28, 1987	Walker	250	492.2	
M.E.	C	4,694,178	Sep 15, 1987	Harte	250	396	
M.E.	D	4,876,112	Oct 24, 1989	Kaito et al.	427	38	
M.E.	E	5,051,556	Sep 24, 1991	Sakamoto	219	121.25	
M.E.	F	5,188,705	Feb 23, 1993	Swanson	156	643	
M.E.	G	5,435,850	Jul 25, 1995	Rasmussen	118	726	
M.E.	H	5,827,786	Oct 27, 1998	Puretz	438	789	
M.E.	I	5,945,677	Aug 31, 1999	Leung	250	396	
M.E.	J	6,011,269	Jan 4, 2000	Veneklasen	250	492.23	

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

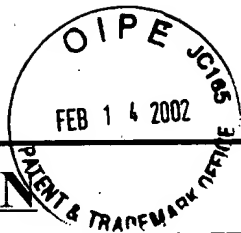
*Examiner Initial	Cite No.	
M.E.	K	BAUER, E., Koziol, C., Lilienkamp, G., Schmidt, T., "Spectromicroscopy in a Low Energy Electron Microscope," <i>Journal of Electron Spectroscopy and Related Phenomena</i> 84 (1997) pp 201-209
M.E.	L	EDINGER, KLAUS AND KRAUS, THOMAS, "Modeling of Focused Ion Beam Induced Surface Chemistry," <i>Journal of Vacuum Science Technology B</i> 18(6), Nov/Dec 2000; pp 3190-3193.
M.E.	M	LEE, Y., et al. "Development of Ion Sources for Ion Projection Lithography" <i>Journal of Vacuum Science Technology, B</i> 14(6), Nov/Dec 1996; pp 3947-3950.



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U.M.E.	N	ORLOFF, J., LI, J. Z., SATO, M., "Experimental Study of a Focused Ion Beam Probe Size and Comparison with Theory," <i>Journal of Vacuum Science Technology</i> , B 9 (5), Sep/Oct 1991, pp 2609-2612.
U.M.E.	O	ORLOFF, J., and SWANSON, L. W., "Some Considerations on the Design of a Field Emission Gun for a Shaped Spit Lithography System," <i>Optik</i> , Vol. 61, No.3 (1982), pp 237-245.
U.M.E.	P	ORLOFF, J., and SUDRAUD, Pierre, "Design of a 100 kV, High Resolution Focused Ion Beam Column with a Liquid Metal Ion Source" <i>Microelectronic Engineering</i> 3 (1985)pp. 161-165
U.M.E.	Q	SATO, M., and ORLOFF, J. "A Method for calculating the Current Density of Charged Particle Beams and the Effect of Finite Source Size and Spherical and Chromatic Aberrations on the Focusing Characteristics," <i>Journal of Vacuum Science Technology</i> , B, Vol 9, No. 5, Sep/Oct 1991; pp 2602-2608
U.M.E.	R	STICKEL, W., "Simulation of Columb Interactions in Electron Beam Lithography Systems- A Comparison of Theoretical Models," Papers from the 42 nd International Conference on Electron, Ion, and Photon Beam Technology and Nanofabrication, 26-29 May 1998.
U.M.E.	S	SLINGERLAND, H. N., "Optimization of a Chromatically Limited Ion Microprobe," <i>Microelectronic Engineering</i> 2 (1984) 219-226
U.M.E.	T	TUGGLE, D.W., SWANSON, L.W., and GESLEY, M. A., "Current Density Distribution in a Chromatically Limited Electron Microprobe", <i>J. Vac. Sci. Technol.</i> B4 (1) Jan/Feb 1986 pp. 131-134
EXAMINER U.M.E. El-Shammaa		DATE CONSIDERED 12.20.02

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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M.E.	A	4,609,809	02 Sep 86	Yamaguchi	219	121EM	
M.E.	B	4,820,898	11 Apl 89	Slingerland	219	121.12	
M.E.	C	4,874,460	17 Oct 89	Nakagawa	156	626	
M.E.	D	4,894,549	16 Jan 90	Stengl	250	492.2	

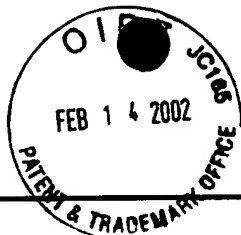
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
M.E.	DE3910054A1	11 Oct 90	Germany	H01J37	30		
M.E.	EP0257685B1	09 Jan 91	European Patent Office	H01J 37	317		
M.E.	JA6169125	09 Apl 86	Japan - Abstract	H01J37	305		
M.E.	WO0075954	14 Dec 00	WIPO	H01J37	317		

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M.E.	E	HAWKES, P.W. and KASPER, E., <u>Principles of Electron Optics</u> , Vol. 2., Applied Geometrical Optics, Academic Press, 1989: Chapters 47, 48. Pp971-1003.
M.E.	F	"Plasma Ion Source-ECR microwave plasma ion source," http://www.tectra.de/plasma-ion-source.htm , Feb 18, 2000 Contact: Dr. Christian Bradley, tectra GmbH, Reuterweg 65, D-60323 Frankfurt/M.
M.E.	G	SLINGERLAND, H.N., BARTH, J.E., KOETS, E. KRAMER, J. van der MAST, K.D., "Proposal for a Second Generation IBPG," Proceedings Microcircuit Engineering Conference, 1984, <i>Microcircuit Engineering</i> , 1985, pp. 381-387



OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)		
M.E.	H	SLINGERLAND, H.N., BOHLANDER, J.H., van der MAST, K.D., KOETS, E., "Progress on the Delft Ion Beam Pattern Generator," <i>Microelectronic Engineering</i> 5 (1986), Elsevier Science Publishers B.V. (North Holland), pp 155-161.
M.E.	I	Van der MAST, K.D., JANSEN, G.H., BARTH, J.E., "The Shower-Beam Concept" <i>Microelectronic Engineering</i> 3 (1985), Elsevier Science Publishers B.V. (North Holland), pp 43-51.
M.E.	J	Van der MAST, K.D., PIJPER, F. J., and BARTH, J.E., "A Flexible Beamshaper," <i>Microelectronic Engineering</i> 5 (1986), Elsevier Science Publishers B.V. (North Holland), pp 115-122.
M.E.	K	VIJGEN, L., "Coulomb Interactions in Focused Ion Beam Columns," 3 Beams Conference 1992.
M.E.	L	VIJGEN, L.J., and KRUIT, P., "Coulomb Interactions in a Shaped Ion Beam Pattern Generator," <i>J. Vac. Sci. Technol. B</i> 10(6), Nov/Dec 1992, pp. 2809-2813.
EXAMINER M.E. Shammaa		DATE CONSIDERED 12.20.02

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APPLICANTS Gerlach et al.					FILING DATE January 19, 2001		GROUP ART UNIT 2881	
U.S. PATENT DOCUMENTS								
*Examiner Initial	Cite No.	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date (if appropriate)	
ME	A	5,093,572	Mar 3, 1992	Hosono	250	310		
ME	B	5,149,974	Sept 22, 1992	Kirch, et al.	250	492.2		
ME	C	5,376,791	Dec 27, 1994	Swanson et al.	250	309		
ME	D	5,574,280	Nov 12, 1996	Fujii et al.	250	309		
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION								
Examiner Initial	Cite No.	Document Number	Date	Country	Class	Sub-class	Translation	
							Yes	No
M.E.	E	EP 0 927 880 A1	21 July 98	European Patent Office	H01J37	20	yes	
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)								
*Examiner Initial	Cite No.							
M.E.	F	EDINGER, Klaus, YUN, Victor, MELNGAILLIS, John and ORLOFF, Jon, "Development of a High Brightness Gas Field Ion Source," <i>J. Vac. Sci. Technol. B</i> (6), Nov/Dec 1997, pp. 2365-2368						
M.E.	F	GUHARAY, S.K., WANG, W., DUDNIKOV, V.G., REISER, M. ORLOFF, J. And MEINGAILLIS, J., "High-brightness Ion Source for Ion Projection Lithography," <i>J. Vac. Sci. Technol. B</i> (6), Nov/Dec 1996, pp. 3907-3910.						
EXAMINER M. El-Shammaa				DATE CONSIDERED 12.20.02				

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